BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Extended Diploma in Horticulture
Unit number and title	Unit 46: Managing soil water
Learning aim	**A:** Explore the requirements of soil water management for land-based industries
Assignment title	**Soil and Soil Water**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You have been given responsibility by your manager for 100 acres of new land which needs preparing for cultivation and to become productive. You have been tasked with investigating a sample of the land in relation to soil and soil water, as the land is very wet and holds too much water for many crops to grow and produce good yield. Formulate a report of your findings to present back to your manager, this can then be used to inform management of the land, rotation, crop choice and viability.
Task 1	Learners must produce a written report focused on soil and soil water. The report must be well structured and give recommendations and actions to ensure land is productive. The report should include and be focused on; • Function and physical properties of soil • Soil structure and texture in relation to soil water and how this related to productivity • Field capacity, wilting point and soil moisture deficit • Relationships and possibilities of irrigation sources • Soil water relationships • Soil water accessibility to plants • Soil water potential.
Checklist of evidence required	A written report.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
A.D1	Evaluate the function and physical properties of soil and soil water.
A.M1	Analyse the function and physical properties of soil and soil water.
A.P1	Explain the function of soil water in environmental management.
A.P2	Identify the physical properties of soil and soil water.

Sources of information to support you with this Assignment	**Books** Ashman,M. Puri, G. (2002). *Essential Soil Science: A Clear and Concise Introduction to Soil Science*. Oxford: Wiley-Blackwell. Weil, R. Brady, N. (2016). *The Nature and Properties of Soils, Global Edition*. 15th ed. London: Pearson. White, R. (2005). *Principles and Practice of Soil Science: The Soil as a Natural Resource*. Oxford: Wiley-Blackwell. Blum, W. Schad, N. (2018). *Essentials of Soil Science: Soil formation, functions, use and classification (World Reference Base, WRB)*. Stuttgart: Borntraeger Gebrueder. **Journals/Magazines** Applied and Environmental Soil Science Journal **Website** vaderstad.com